from each taxpayer. **CONCLUSIONS:** A cancer cure evaluated under current health economic evaluation methods would cause a budget impact that would be unaffordable for governments due to the high prices that could be achieved while remaining cost effective. Although these types of technologies therapies are not currently available, payers might want to explore new methods of evaluation, as exploring the possibility of calculating costs based on quality adjusted lifetimes rather than years or increasing discount rates on QALYs for immunotherapies.

PCN135

ECONOMIC IMPACT OF THE INCLUSION OF PERTUZUMAB FOR THE TREATMENT OF METASTATIC BREAST CANCER HER2 +

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OBJECTIVES: To analyze the economic impact of the incorporation of pertuzumab for the treatment of metastatic breast cancer HER2+ in a University Hospital according to real data of our patients. **METHODS:** Cross-sectional study where the patients with breast cancer were analyzed in our hospital during one year (April 2013 to April 2014). The demographic data of the patients (age and weight) and antineoplastic treatments used were obtained from the computer program Hospiwin®. The dose and efficacy data have been obtained from the phase III CLEOPATRA trial. This clinical trial compares docetaxel + trastuzumab vs docetaxel + trastuzumab + pertuzumab with progression-free survival (PFS) 12.4 (CI 10.4-13.5) vs. 18.5 (CI 16.6-21.6) months respectively. Costs of the drugs were included in the economic model developed in Excel® data base. The time horizon was one year and the perspective of medical leadership of the hospital was used. **RESULTS:** During the study period 371 patients were treated for breast cancer and 75 patients (20.2 %) were HER2+. The mean weight of 71.5 kg (SD = 17.1) and men BMI of 29.3 were obtained. The annual cost of docetaxel + trastuzumab + pertuzumab was 69,245.32 € vs 29,837.4 € (CI (in the docetaxel + trastuzumab treatment group. The cost per PFS per year was 44,964 € (CI 38,469-50,177 €) in the docetaxel + trastuzumab + pertuzumab group vs 29,837 (CI 26,640-35,948 €) in the docetaxel + trastuzumab treatment group. The incremental cost effectiveness ratio (ICER) was 15.127 € /PFS per year. **CONCLUSIONS:** The addition of pertuzumab to treatment with docetaxel / trastuzumab for metastatic breast cancer has shown an increase in SLP. However, the economic impact of this new drug, requires careful selection of patients who could benefit. Health authorities will have to consider whether pertuzumab is cost-effective in terms of their willgness to pay.

PCN136

COST EFFECTIVENESS OF SUNITINIB AS FIRST-LINE TARGETED THERAPY FOR METASTATIC RENAL CELL CARCINOMA IN CHINA

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OBJECTIVES: Multitargeted receptor tyrosine kinase inhibitors are more effective alternatives to interferon-α and monoclonal antibodies in patients with metastatic renal cell carcinoma (mRCC). However, studies on the economic and humanistic outcomes associated with these treatments are sparse in the Chinese setting. This study evaluated the clinical and economic consequences of sunitinib compared with sorafenib and interferon-α from the third-party payer's perspective in China. **METHODS:** A Markov model was developed to simulate disease progression and determine cost and outcomes over patient's lifetime. The time horizon of analysis was patients' lifetime with a maximum of five years in cycles of six weeks. The model was used to conduct a cost-utility analysis on sunitinib compared to interferon-α and sorafinib. Costs of physician, anti-cancer medications, hospitalization, laboratory, and palliative care were estimated. Outcomes were measured in progression-free life years (PFLYs), life years (LYs) and quality-adjusted life years (QALYs). A 3.5% discount rate was applied to both costs and QALYs gained. **RESULTS:** In the base case, the total cost of the sunitinib arm was RMB217,038.50, the progression-free life year was 1.57, life year was 2.55, and QALY was 1.70. The incremental cost per PFLY between sunitinib and IFN-α was –RMB78,562.10 and RMB 22,501.03 between sunitinib and sorafenib. The incremental cost per life year between sunitnib and IFN-α was –RMB168,633.00 and RMB 21,022.38 between sunitinib and sorafenib. The incremental cost per QALY between sunitnib and IFN-α was –RMB184,825.00 and RMB 29,493.42 between sunitinib and sorafenib. **CONCLUSIONS:** This economic study used the final clinical results of the pivotal sunitinib trial that provides more accurate modeling results than previous studies based on extrapolation. It was found that sunitinib was dominant compared to IFN-α. Sunitinib was cost effective compared to sorafenib based on the threshold recommended by the World Health Organization.

PCN137

AN EVIDENCE-BASED MODEL DESIGN TO INFORM THE COST-EFFECTIVENESS EVALUATION OF PRIMARY ENDOCRINE THERAPY AND SURGERY FOR OLDER WOMEN WITH PRIMARY BREAST CANCER

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OBJECTIVES: Despite the lack of evidence-based information on their clinical and cost-effectiveness, surgery and primary endocrine therapy (PET) are the most commonly used initial treatment strategies for older women with primary breast cancer in the United Kingdom (UK). To evaluate the cost-effectiveness of PET and surgery, a decision analytical modelling is necessary. This systematic review aimed to summarise the modelling methodologies from the literature to inform the model design in older women. **METHODS:** An electronic database search was conducted using NHS Economic Evaluation Database, Cochrane Library, Ovid Medline, PubMed, and EMBASE to identify full economic evaluations that compared different treatment strategies in postmenopausal women with primary breast cancer. Quality and modelling methodologies of included studies were assessed and summarised. **RESULTS:** All the 31 included studies assessed surgery and none assessed PET as the initial treatment. Most included economic studies used a Markov model with life-time horizon and 1-year cycle length. Nine studies which included sub-group analysis for older women (over 65 years old) used similar economic models and transition states with younger women (50 to 65 years old). The key disease-related health states were disease-free, recurrence, and death. Recurrence was mostly separated into loco-regional and distant recurrence. **CONCLUSIONS:** This systematic review can inform the design of an economic model comparing PET with surgery as initial treatment in older women based on the following assumptions: (1) health states are applicable across age groups; (2) transition states for modelling surgery in the literature are transferable to model the same treatment for older women; (3) metastasis transition states including progression, progression-free, and death can be used to model the PET pathway. Future study will validate this model by using a longitudinal dataset of older women with primary breast cancer, and synthesize data from different data sources to populate this economic model.

PCN138

COST EFFECTIVENESS OF CETUXIMAB IN 1ST-LINE TREATMENT OF RAS WILD-TYPE METASTATIC COLORECTAL CANCER IN SCOTLAND: A SUMMARY OF THE SUBMISSION TO THE SCOTTISH MEDICINES CONSORTIUM

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OBJECTIVES: Colorectal cancer is the third most common cancer in Scotland, with nearly 4,000 cases reported in 2011 and 5.2% increase in incidence in the previous 10 years. Recent studies have shown that a subgroup of metastatic colorectal cancer (mCRC) patients with wild-type (wt) RAS (KRAS and NRAS exons 2,3, 4) expressing tumours are likely to have enhanced response to anti-EGFR treatment compared to patients with mutant RAS exons [2,3,4]. RAS biomarkers aid identification of the patient group that is likely to benefit the most from anti-EGFR treatment such as cetuximab and therefore allow more efficient use of NHS Scotland resources. A New Product Assessment Form was submitted to the Scottish Medicines Consortium with the aim of demonstrating the latest improved outcomes in RAS wt mCRC patients (versus KRAS wt) treated with cetuximab in combination with chemotherapy and its cost effectiveness compared to currently available treatments. **METHODS:** A state-transition Markov cohort model was developed to simulate patient outcomes and costs for first and subsequent lines of treatment including the long-term survival after a successful curative resection of liver metastases. **RESULTS:** The model estimated an incremental 0.28 life-years gained (LYG) with cetuximab + FOLFIRI compared to FOLFIRI alone and an incremental 0.32 LYG with cetuximab + FOLFOX compared to FOLFOX alone. The model was most sensitive to length of treatment with cetuximab. **CONCLUSIONS:** The incremental cost effectiveness ratios imputed in the model are close to the traditional willingness to pay threshold adopted by the SMC. This analysis demonstrates that cetuximab in combination with FOLFIRI or FOLFOX in mCRC RAS wt patients is a cost-effective treatment compared with chemotherapy alone, specifically when taking into consideration that cetuximab qualifies as an end of life medicine (following SMC criteria) which raises the value of such intervention.

PCN140

COST-EFFECTIVENESS ANALYSIS OF BEVACIZUMAB, FOTEMUSTINE AND EXTENDED-DOSE TEMOZOLOMIDE IN PATIENTS WITH RECURRENT GLIOBLASTOMA IN SPAIN

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The treatment of glioblastoma after first-line treatment progression is not clearly established in Spain. Most accepted alternatives are nitrosoureas (fotemustine, F), extended-dose temozolomide (eT) or bevacizumab (B). Without clear standards of care, increased clinical and health policy uncertainty among decision makers should be clarified. So, economic evaluation might reduce those uncertainties. **OBJECTIVES:** To analyze the cost-effectiveness of bevacizumab, extended-dose temozolomide and fotemustine in patients with either recurrent or progressive glioblastoma after standard therapy, compared to standard clinical practice (SCP). **METHODS:** A cost-effectiveness markov model was conducted from a payer perspective (time horizon 1 year, 3%, discount rate, 2012, €). Our model got three health states: alive without progression, alive with toxicity and progression as absorbing state. We subsequently performed a deterministic and probabilistic analysis of sensitivity. Main efficacy outcome was progression-free survival at six months (6m PFS). Toxicity data was based on relevant phase II studies. Health state utility values were estimated based on published values from an HTA report by Garside et al, 2007. Costs were obtained from a Spanish University Hospital. **RESULTS:** Cost/effectiveness ratios were: SCP (based on carmustine) 2,368.45 €/year to obtain 6m PFS with stable health state utility value, F 4,112.97 €/year, B 15,122.49 €/year and eT 5,470.05 €/year. Incremental cost-effectiveness ratios were: F 7,404.12 €/year €/year to obtain 6m PFS with stable health state utility value, B 40,371.8 €/year and eT 45,853.51 €/year. Tornado diagram and CEAC showed our results robustness. **CONCLUSIONS:** ICER analysis shows fotemustine to be the dominant option in the treatment of patients with recurrent or progressive glioblastoma.

PCN141

PHARMACOECONOMIC ANALYSIS OF AXITINIB AS SECOND-LINE TREATMENT FOR METASTATIC RENAL CELL CARCINOMA

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